## **REMARKS**

Reconsideration and withdrawal of the rejection of the elected claims (namely, Claims 1, 3-10, and 18) are respectfully requested in view of the foregoing amendments and the following remarks.

Concerning initially the Examiner's statement in paragraph 1 regarding the withdrawal of Claim 17 from consideration as being directed to a non-elected invention, the claim has been so designated in the amendment of the claims as previously set forth. With respect to the objection to Claim 3, by this Amendment the specification has been amended to provide specific support for the language in original Claim 3, thereby obviating this ground of rejection.

With respect to the 112 rejection of Claims 1, 3, 5-8. 10 and 18, Claim 1 has been amended to define the sealed end of the hollow needle as being brought "at least" into close proximity with the patients body in the region of the tumor. As noted in the specification at page 9, lines 13 - 17, the needle can be located <u>adjacent to the skin area</u> under which the tumor lies or it can be inserted through the skin and into the tumor below the skin. Accordingly, it is believed that Claim 1 is now definite. With

respect to Claim 3, it is believed that Claim 3 is now definite in light of the amendment to the specification. As to Claim 18, the phrase "feed through accelerator" has been deleted and replaced with "high voltage acceleration stage" to thereby obviate the objection based on improper antecedent basis. Finally, the dependency of Claims 4 and 9 have been rewritten as being dependent upon Claim 1.

Turning now to the 102 and 103 rejection of the claims as being anticipated or obvious over Schmidt it should be noted that the ion source in Schmidt is <u>not</u> an <u>electron bombardment ion device</u>, as presently claimed, but is an <u>arc discharge source</u> which is not suitable for the present invention. As noted in the Abstract, 4<sup>th</sup> paragraph:

"Positive ions are generated inside the anode discharge chamber by means of a self-sustaining low pressure high-voltage cold cathode discharge with the ionizing electrons trapped in a region of crossed magnetic and electric fields".

Schmidt also clearly describes the magnets used in his invention in paragraph 2 of the Abstract and in col. 6 lines 40+, and the effect of the electrons of the magnetic and electric fields at col. 7 lines 40+.

In the present invention, an electron bombardment iron source is used as shown in Fig. 2 and there are no magnets nor cross-magnetic and electrical fields to trap electrons. There is instead an electric beam via an electron bombardment ion source

bombarding the deuterium/tritium mixture gas introduced to the source shown in Fig.

2. Thus, Schmidt's invention of an arc discharge source, as shown in Fig. 1 thereof, is clearly significantly different in construction and operation from the high current electron bombardment ion source used (and claimed) in the present invention.

It should be noted that none of Schmidt's embodiments (Figs. 4, 6, 8, or 9) could possibly be used in a brachytherapy application where the needle must be inserted through the skin to a deeply occurring cancer. Schmidt designed a neutron beam radiotherapy treatment facility used in Hamburg, Germany. The Hamburg device was built to operate at high power levels, perhaps 100 kilowatts (compared to 25 watts of the electron bombardment source of Claim 3) with circulation cooling in the source; as such, it also would not be suitable for brachytherapy where the needle is in contact with the patient.

Accordingly, it is believed that the claims as currently amended are clearly patentably distinguishable over this reference. In view of the foregoing, reconsideration and withdrawal of the rejection and allowance of the elected claims is earnestly solicited.

Finally, Applicant hereby requests a two month extension of time in which to respond to the outstanding Office Action. Credit Card payment form no. PTO-2038

in the amount of \$215.00 is enclosed. Any fee deficiency or overpayment may be charged or credited to applicant's Deposit Account No. 07-0130.

Respectfully submitted,

**LEON FORMAN** 

Thomas M. Galgarof, (27,638) GALGANO & BURKE, LLP Attorneys for Applicant 300 Rabro Drive, Suite 135 Hauppauge, NY 11788 (631) 582-6161

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Enclosures: USPTO Form 2038 in the amount of \$215.00

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7, 2004

By:

Thomas M. Galgano, Esq.,

Dated: December 7, 2004